

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Amendments to the Claims:

1. – 13. (Canceled)

14. (Currently Amended) A seal structure of a fuel cell, said fuel cell including an MEA, a separator made from metal, a gas passage formed in said separator, a gas manifold formed in said separator, a connecting gas passage formed in said separator and between said gas passage and said gas manifold, a coolant passage formed in said separator, a coolant manifold formed in said separator, a connecting coolant passage formed in said separator and between said coolant passage and said coolant manifold, and a seal for preventing gas and/or coolant from leaking and defining a continuous seal line, said seal structure of a fuel, comprising:

an interrupted back-up disposed at an at least one of said connecting gas passage and said connecting coolant passage,

wherein said back-up is located on one side of said separator and a portion of the seal line located on the other side of said separator being disposed such that said back-up and said portion of said seal line are overlapped with each other in a fuel cell stacking direction,

wherein characterized in that said back-up is formed in said separator and includes a rib having a convex and concave structure, and

wherein the separator is made from metal and the back-up is integrally formed in the metal separator.

15. (Previously Presented) A seal structure of a fuel cell according to claim 14, wherein said back-up is disposed at said connecting gas passage between said gas passage and said gas manifold.

16. (Previously Presented) A seal structure of a fuel cell according to claim 14, wherein said

back-up is disposed at said connecting coolant passage between said coolant passage and said coolant manifold.

17. (Currently Amended) A seal structure of a fuel cell according to claim 14, wherein though said gas manifold and said coolant manifold ~~differs~~differ in width to each other, said interrupted back-up and a portion of said seal line positioned in an extension of said interrupted back-up are disposed on a same straight line.

18. (Previously Presented) A seal structure of a fuel cell according to claim 14, wherein said back-up is formed in said separator and includes a plurality of protrusions spaced from each other.

19. (Previously Presented) A seal structure of a fuel cell according to claim 14, wherein said back-up is formed in said separator and includes a rib having a plurality of tunnels formed in said rib and spaced from each other.

20. (Currently Amended) A seal structure of a fuel cell according to claim 14, wherein an entire portion of said back-up located between adjacent separators is formed in ~~either~~one separator of the adjacent separators.

21. (Previously Presented) A seal structure of a fuel cell according to claim 14, wherein a portion of said back-up located between adjacent separators is formed in one separator of the adjacent separators, and a remaining portion of said back-up located between adjacent separators is formed in the other separator of the adjacent separators.

22. (New) A seal structure of a fuel cell according to claim 14, wherein said back-up is formed in said separator and includes a rib having a plurality of tunnels formed in said rib, between the separator and a cover plate, and spaced from each other.

23. (New) A seal structure of a fuel cell, said fuel cell including an MEA, a separator made

from metal, a gas passage formed in said separator, a gas manifold formed in said separator, a connecting gas passage formed in said separator and between said gas passage and said gas manifold, a coolant passage formed in said separator, a coolant manifold formed in said separator, a connecting coolant passage formed in said separator and between said coolant passage and said coolant manifold, and a seal for preventing gas and/or coolant from leaking and defining a continuous seal line, said seal structure of a fuel, comprising:

an interrupted back-up disposed at an at least one of said connecting gas passage and said connecting coolant passage,

wherein said back-up being located on one side of said separator and a portion of the seal line located on the other side of said separator being disposed such that said back-up and said portion of said seal line are overlapped with each other in a fuel cell stacking direction,

wherein said back-up is formed in said separator and includes a rib having a convex and concave structure,

wherein the back-up is integrally formed in the metal separator, and

wherein said back-up is formed at the at least one of said connecting gas passage and said connecting coolant passage at a portion of said separator where the seal does not exist.

24. (New) A seal structure of a fuel cell according to claim 23, wherein said back-up is formed in said separator and includes a rib having a plurality of tunnels formed in said rib, between the separator and a cover plate, and spaced from each other.